

REMARKS

In an Office Action mailed on September 22, 2004, objections were made to claims 46 and 47; claim 54 was rejected under 35 U.S.C. § 112, first paragraph; claims 1-5, 7, 8, 10, 11, 14, 15, 17, 18, 20, 41, 43-45, 48, 61-63, 65-69, 71, 72 and 75-78 were rejected under 35 U.S.C. § 102(b) as being anticipated by Tubel; claims 31, 35, 41, 42, 44, 45, 48 and 75-77 were rejected under 35 U.S.C. § 102(b) as being anticipated by Thiercelin; claims 1-4, 7, 8, 10-14, 17, 18 and 75-77 were rejected under 35 U.S.C. § 102(b) as being anticipated by Cooke; claims 50-56 were indicated as being allowed; and claims 32-34, 36-40, 46, 47, 49, 64, 70, 73 and 74 were objected to as being dependent upon rejected base claims but were indicated as being allowable if rewritten in independent form.

Claims 6, 9, 16, 19, 21-30, 57-60, 63, 69 and 79-81 have been cancelled in view of the previous restriction election. Claims 32-34, 36 and 46, which were indicated as being allowable by the Examiner, have been rewritten in independent form as newly-added independent claims 82-84, 85 and 90, respectively. Therefore, allowance of newly-added claims 82-93 is requested. It is noted that the limitations of claims 42 and 46 have been combined in independent claim 90, as original claim 46 should have depended from claim 42, as pointed out by the Examiner. In view of these new claims, claims 32-34, 36, 42 and 46 have been canceled.

Newly-added claims 94-98 are patentable over the cited art, for at least the reason that none of the cited art teaches or suggest a sensor and a packer having a slip, in the arrangement that is set forth in independent claim 94. See discussion of independent claim 11 below.

The Office Action states that claim 54 is both allowed and rejected under 35 U.S.C. § 112, first paragraph. It is therefore assumed that claim 54 stands rejected under § 112. In response to the § 112 rejection of claim 54, Applicant points out that claim 54 recites that the puncture device includes a shaped charge. Claim 50 (from which claim 54 depends) recites providing a puncture device inside a packer and actuating the puncture device when the packer is set to pierce the casing to establish communication with a region outside of the casing. Therefore, although the Examiner contends, "the specification fails to disclose how a shaped charge is actuated in response to the setting of the packer," the alleged "response to" language does not appear in claim 50. Instead, claim 50 merely recites that the puncture device is actuated when the packer is set. Such an arrangement is depicted in Fig. 8 and is described in the corresponding text of the specification. Thus, for at least the reason that the specification

provides an enabling disclosure for at least one embodiment of claim 54, withdrawal of the corresponding Section 112, first paragraph rejection of claim 54 is requested.

Claim 47 has been amended to overcome the corresponding objection.

Claims 1-5, 7, 8, 10, 12-15, 17, 41, 43-45, 48, 49 and 75-78 have been canceled without prejudice for purposes of expediting prosecution of the application. The § 102 rejections are addressed below.

Rejections of Claims 11, 18 and 20:

As amended, the method of independent claim 11 includes producing fluid from a well; using a non-acoustic sensor during the producing to measure a characteristic of a region of the well outside of the casing; placing the sensor in a packer; deploying the packer downhole; setting the packer; and engaging a slip to secure the packer to the casing. The method also recites positioning the sensor against an interior wall of the casing in response to the setting of the packer.

Contrary to the limitations of amended independent claim 11, Tubel neither teaches nor suggests positioning a sensor against an interior wall of a casing in response to setting a packer. Although Cooke discloses temperature sensors that are brought into contact with the interior wall of a casing when an inflatable packer is inflated, this inflatable packer does not have slips. *See, for example*, Fig. 3 of Cooke and the corresponding text found in lines 21-58 in column 7 of Cooke. Therefore, for at least these reasons, Applicant submits that amended independent claim 11 overcomes the § 102 rejections.

Claims 18 and 20 are patentable for at least the reason that these claims depend from an allowable claim. Thus, withdrawal of the § 102 rejections of claims 11, 18 and 20 is requested.

Rejections of Claims 31 and 35:

As amended, the apparatus of independent claim 31 includes a punch that is adapted to be positioned inside a passageway of the casing and pierce the casing to establish communication at a region outside of the casing. Furthermore, the apparatus includes a sensor that is adapted to be positioned inside the passageway of the casing to indicate a characteristic that is associated with the casing.

The Examiner rejects claim 31 under 35 U.S.C. § 102(b) in view of Thiercelin. However, in view of the construction of claim 31 set forth in the Office Action, the Examiner is ignoring the explicit language of claim 31, which defines the punch. In other words, the punch of claim 31 is adapted to pierce a casing to establish communication with a region outside of the casing. Thus, when all limitations are considered, claim 31 is distinguishable over Thiercelin's borehole penetrometer, as this the penetrometer, however, does not extend into a well casing. Instead, Thiercelin is concerned with measuring the deflection of the penetrometer into an uncased borehole wall for purposes of determining formation characteristics.

The Examiner states that the alleged functional language of claim 31 is not being assigned patentable weight. Office Action, 3-4. However, contrary to the Examiner's construction of claim 31, the Federal Circuit has stated it is improper delete functional language from a claim in performing an invalidity determination under Section 102. *Pac-tec, Inc. v. Amerace Corporation*, 14 USPQ2d 1871, 1876 (Fed. Cir. 1990). The *Pac-tec* court rejected a construction of claims that eliminated functional limitations so that the claims were reduced to a mere collection of parts. *Id.* That is exactly what the Examiner's construction of claim 31 does in the present application, namely, ignore specifically recited words so that claim 31 is in effect a mere collection of parts. However, contrary to this construction, the alleged functional language of claim 31 defines the punch and its relationship to the sensor and thus, should be assigned patentable weight. *See, In re Venezia*, 189 USPQ 149, 151-152 (CCPA 1976) (stating "there is nothing wrong in defining the structures of the components . . . in terms of the interrelationship of the components").

Thus, when the language of claim 31 is properly construed and expressly recited words of claim 31 are given the patentable weight that they are due, it becomes clear that Thiercelin does not teach or even suggest all of the limitations of independent claim 31.

Claim 35 is patentable for at least the reason that this claim depends from an allowable claim. Therefore, for at least the reasons that are set forth above, withdrawal of the § 102 rejections of claims 31 and 35 is requested.

Rejections of Claims 61, 62, 65 and 66:

The method of independent claim 61 includes establishing a sealed region downhole and within the sealed region, piercing a casing of a well. The method also recites without flowing

fluids uphole from the sealed region, using the pierced casing to measure a characteristic that is associated with a region outside of the casing.

Contrary to the limitations of independent claim 61, Tubel fails to teach or suggest using a pierced casing to measure a characteristic associated with a region outside of the casing without flowing fluids uphole from a sealed region. In the rejection of claim 61, the Examiner generally refers to reference numeral 81, a reference numeral that appears to be directed at perforation tunnels. However, there is no teaching or suggestion in Tubel regarding perforating apparatuses as parts of the strings that are depicted in Tubel, and there is no teaching or suggestion in Tubel regarding using a pierced casing to measure a characteristic without flowing fluids uphole from a sealed region. Without any of these teachings, Tubel fails to anticipate independent claim 61.

Claims 62, 65 and 66 are patentable for at least the reason that these claims depend from an allowable independent claim. Therefore, for at least the reasons that are set forth above, withdrawal of the § 102 rejections of claims 61, 62, 65 and 66 is requested.

Rejections of Claims 67, 68, and 71:

The method of independent claim 67 recites without flowing fluids uphole from a sealed region in a well using the results of piercing a casing of the well to establish an array of downhole sensors.

See discussion of independent claim 61 above. For at least the reason that Tubel fails to teach or suggest using results of piercing a well casing to establish an array of downhole sensors without flowing fluids uphole from a sealed region, Tubel fails to anticipate independent claim 67. In this manner, none of the production strings that are disclosed in Tubel contain a perforating gun, Tubel does not teach or even suggest an array of downhole sensors, and Tubel does not teach or even suggest using results of piercing a well casing to establish such an array without flowing fluids uphole from the sealed region. Therefore, for at least any of these reasons, Tubel fails to anticipate claim 67.

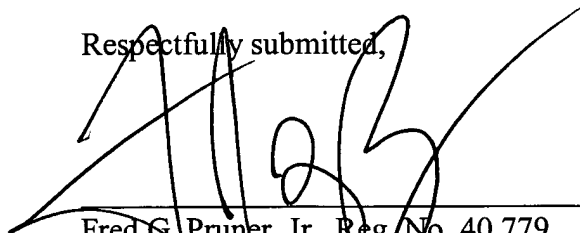
Claims 68 and 71 are patentable for at least the reason that these claims depend from an allowable independent claim. Therefore, withdrawal of the § 102 rejections of claims 67, 68 and 71 is requested.

CONCLUSION

In view of the foregoing, withdrawal of the §§ 102 and 112 rejections and a favorable action in the form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (SHL.0098US).

Date: December 22, 2004

Respectfully submitted,



Fred G. Pruner, Jr., Reg. No. 40,779
TROP, PRUNER & HU, P.C.
8554 KATY FREEWAY, SUITE 100
HOUSTON, TEXAS 77024
713/468-8880 [Phone]
713/468-8883 [Fax]